

# **MONTHLY WEATHER REVIEW,**

## **JANUARY, 1875.**

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**WAR DEPARTMENT,**

*Office of the Chief Signal Officer,*

DIVISION OF

**TELEGRAMS AND REPORTS FOR THE BENEFIT OF COMMERCE AND AGRICULTURE**

### **INTRODUCTION.**

In the preparation of this Review, besides the regular reports from the Signal Service stations, United States Army, and Canadian stations, there have been examined monthly meteorological records from many volunteer observers and post surgeons, the latter forwarded by the Surgeon General, United States Army, and other records, from which valuable data have been extracted. Chart No. I, showing the movement of areas of low and high barometers, and chart No. II, giving the isothermal and isobaric curves and prevailing direction of the wind for the month, have been prepared from the observations taken at the Signal Service and Canadian stations alone, for the reason that the barometers and the thermometers of the volunteer observers have not been compared with the Signal Service standards, and their instrumental errors are not known.

The most noticeable features of the month are the tracing, approximately, of the paths of several storm-centres from the Pacific coast to the Atlantic coast; the deficiency in the mean temperature in all the districts east of the Rocky Mountains, compared with the average of many years, as well as that of January, 1874; the excess of barometric pressure over that for the same month, 1874, in all the sections, except on the South Atlantic and Gulf coast; the large excess of precipitation in the South Atlantic and East Gulf States and Tennessee above the average; decidedly lower water in the Ohio river and Mississippi from Cairo down, but considerably higher in the Cumberland, than during January, 1874.

### **BAROMETRIC PRESSURE.**

An examination of chart No. II shows the pressure to have been above the average in all the districts, except on the Gulf and Atlantic coasts, which is explained by the number of areas of unusually high barometers which have extended south and eastward from the Northwest over the entire country east of the Rocky Mountains. For January, 1874, the highest barometric pressure (30.20) covers the South Atlantic and Gulf States, and the lowest Lake Huron. For the present month the highest (30.25) extends south and eastward from the Northwest over Kansas, Missouri, Illinois and the western portion of Kentucky and Tennessee; the lowest over Maine and the eastern British Provinces.